

AMENDMENTS TO THE CLAIMS

Claims 1-21 in the Application as filed October 9, 2003 were cancelled by an accompanying Preliminary Amendment, that also added new claims 22-60. Claims 22-60 were rejected in an Office action mailed February 14, 2005, to which a response was filed May 6, 2005. Claims 22-60 are now pending in the Application, and have all been rejected in the instant Office action. Claims 22, 44, 52, 55 and 60 are amended in this response. Claims 22, 32, 33, 44, 52, 55, and 60 are independent claims. Claims 23-31, 34-43, 45-51, 53-54, and 56-59 depend, respectively, from independent claims 22, 33, 44, 52, and 55.

Listing of Claims:

Claims 1-21 (Canceled).

Claim 22. (Currently amended) A method for processing voice for communication via a communication network having variable propagation delays comprising:

receiving digitized voice data packets;

depacketizing the received digitized voice data packets;

after depacketizing, buffering the received digitized voice data for an adjustable buffer time to delay reproduction of the voice;

determining a propagation delay; and

adjusting the buffer time in accordance with the determined propagation delay.

Claim 23. (Previously Presented) A method as recited in claim 22 wherein the buffer time is adjusted based on a round trip propagation time.

Claim 24. (Previously Presented) A method as recited in claim 22 wherein the propagation delay is determined from a received packet.

Claim 25. (Previously Presented) A method as recited in claim 22 wherein the buffer time is a calculated delay.

Claim 26. (Previously Presented) A method as recited in claim 22 wherein the buffer time is adjusted based on a propagation time of a test packet.

Claim 27. (Previously Presented) A method as recited in claim 22 wherein the buffering occurs after depacketization.

Claim 28. (Previously Presented) A method as recited in claim 22 wherein the buffer time is adjusted once per a call.

Claim 29. (Previously Presented) A method as recited in claim 22 wherein the buffer time is adjustable more than once per a call.

Claim 30. (Previously Presented) A method as recited in claim 22 wherein the propagation delay is determined during a call set up.

Claim 31. (Previously Presented) A method as recited in claim 22 wherein the propagation delay is determined prior to the receipt of the digitized voice packets.

Claim 32. (Previously Presented) A method for processing voice for communication via a communication network having variable propagation delays comprising:

receiving digitized voice data packets;

depacketizing the received digitized voice data packets;

buffering the received digitized voice data for an adjustable buffer time to delay reproduction of the voice;

detecting an error in the buffer time; and

adjusting the buffer time in response to a detected error.

Claim 33. (Previously Presented) A method for processing voice for communication via a communication network having variable propagation delays comprising:

receiving digitized voice data packets, each voice data packet having a group identifier;

buffering received digitized voice data for an adjustable buffer time to delay the reproduction of the voice data of the first received voice packet of a group for at least the buffer time; and

adjusting the buffer time.

Claim 34. (Previously Presented) A method as recited in claim 33 including determining a propagation delay and adjusting the buffer time in accordance with the propagation delay to prevent gaps in the voice reproduced from voice data packets associated with the same group.

Claim 35. (Previously Presented) A method as recited in claim 34 wherein the buffer time is adjusted based on a round trip propagation time.

Claim 36. (Previously Presented) A method as recited in claim 34 wherein the propagation delay is determined from a received packet.

Claim 37. (Previously Presented) A method as recited in claim 34 wherein the buffer time is a calculated delay.

Claim 38. (Previously Presented) A method as recited in claim 34 wherein the buffer time is adjusted based on a propagation time of a test packet.

Claim 39. (Previously Presented) A method as recited in claim 34 wherein the buffer time is adjusted once per a call.

Claim 40. (Previously Presented) A method as recited in claim 34 wherein the buffer time is adjustable more than once per a call.

Claim 41. (Previously Presented) A method as recited in claim 34 wherein the propagation delay is determined during a call set up.

Claim 42. (Previously Presented) A method as recited in claim 34 wherein the propagation delay is determined prior to the receipt of the digitized voice packets.

Claim 43. (Previously Presented) A method as recited in claim 33 including detecting an error in the buffer time and adjusting the buffer time in response to a detected error.

Claim 44. (Currently amended) A method for processing voice for communication via a communication network having variable propagation times between a source and a destination comprising:

receiving digitized voice data packets;

buffering ~~the received~~ depacketized digitized voice data for an adjustable buffer time to delay reproduction of the voice;

determining variations in propagation times between the source and destination; and

adjusting the buffer time in response to variations in propagation times.

Claim 45. (Previously Presented) A method as recited in claim 44 wherein the buffer time is adjusted once per a call if necessary when variations in propagation times between the source and the destination are slow.

Claim 46. (Previously Presented) A method as recited in claim 44 wherein the buffer time is adjustable more than once per a call.

Claim 47. (Previously Presented) A method as recited in claim 44 wherein the buffer time is adjusted based on a round trip propagation time.

Claim 48. (Previously Presented) A method as recited in claim 44 wherein the propagation delay is determined from a received packet.

Claim 49. (Previously Presented) A method as recited in claim 44 wherein the buffer time is a calculated delay.

Claim 50. (Previously Presented) A method as recited in claim 44 wherein the buffer time is adjusted based on a propagation time of a test packet.

Claim 51. (Previously Presented) A method as recited in claim 44 including depacketizing the voice data packets and wherein the buffering occurs after depacketization.

Claim 52. (Currently amended) A method for processing voice for a device capable of wireless internet protocol communications over a network comprising:

receiving a voice stream;

digitizing the voice stream to provide digital voice data;

compressing the digital voice data;

packetizing the digital voice data according to an internet protocol for communication over the network;

transmitting via wireless communication the digital voice data packets;

receiving digital voice data packets communicated over the network;

converting the received digital voice data packets to a voice stream; and

buffering, for a buffer time, ~~the received~~ depacketized digital voice data before converting the digital voice data to a voice stream, the buffer time being adjustable to accommodate variations in propagation times over the network.

Claim 53. (Previously Presented) A method as recited in claim 52 wherein the packetizing includes adding a group identifier to each digital voice data packet.

Claim 54. (Previously Presented) A method as recited in claim 53 includes monitoring the received voice stream for a lack of voice for a minimum period of time; and adding a different group identifier to a voice stream with voice that is subsequent to the lack of voice for the minimum period of time.

Claim 55. (Currently amended) A system for processing voice for transmission over a network having variable propagation delays comprising:

conversion circuitry for converting an analog voice stream to digital voice data and for converting digital voice data to an analog voice stream for the reproduction of voice;

a processing circuit for managing the packetization of the digital voice data to provide digital voice data packets and for managing the depacketization of digital voice data packets; and

a buffer for buffering digital voice data after depacketization, the processing circuit directing delivery of the buffered digital voice data to the conversion circuitry after a delay that is adjustable by the processing circuit to accommodate variations in packet propagation delays over the network.

Claim 56. (Previously Presented) A system as recited in claim 55 wherein the conversion circuitry compresses and decompresses the digital voice data.

Claim 57. (Previously Presented) A system as recited in claim 55 wherein the processing circuit delays the delivery of buffered digital voice data to the conversion circuitry until the buffer contains sufficient data to prevent a gap in the reproduced voice.

Claim 58. (Previously Presented) A system as recited in claim 55 wherein the processing circuit packetizes the digital voice data according to an internet protocol.

Claim 59. (Previously Presented) A system as recited in claim 55 wherein the system includes a transmitter and receiver for wireless communication of digital voice packets.

Claim 60. (Currently amended) A system for processing voice for transmission over a network having variable propagation delays comprising:

a transmitter and receiver for wireless communication;

conversion circuitry for converting an analog voice stream to digital voice data and for converting digital voice data to an analog voice stream for the reproduction of voice;

a processing circuit for managing the packetization of the digital voice data to provide digital voice data packets and for managing the depacketization of digital voice data packets, the processing circuit packetizing the digital voice data according to an internet protocol; and

a buffer for buffering digital voice data after depacketization, the processing circuit directing delivery of the buffered digital voice data to the conversion circuitry after a delay that is adjustable by the processing circuit to accommodate variations in packet propagation delays over the network.